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CLAIMS

1 1. A video display apparatus, operable at a plurality scanning frequencies  
2 and including scanning beam velocity modulation, comprising:

3 a controllable scanning velocity modulation signal amplifier for  
4 generating an scanning velocity modulation deflection signal responsive to a  
5 scanning velocity modulation signal; and,

6 means for generating a control signal coupled to said amplifier for  
7 open loop control of said scanning velocity modulation deflection signal in  
8 amplitude responsive to selected ones of said plurality of scanning frequencies.

1 2. The video display apparatus of claim 1, wherein said control signal  
2 reduces said scanning velocity modulation deflection signal amplitude in  
3 accordance with an increasing scanning frequency of said plurality of scanning  
4 frequencies.

1 3. The method according to claim 1, comprising a further step of:  
2 selecting a different one of said plurality of horizontal scanning  
3 frequencies and reducing said amplitude of a scanning velocity modulation signal  
4 in accordance with said different one having a horizontal scanning frequency  
5 greater than a horizontal scanning frequency of a prior selection.

1 4. A method for controlling scan velocity modulation in a video display  
2 apparatus operable at a plurality of horizontal scanning frequencies, comprising  
3 the steps of:

4 generating from a signal coupled for display by said apparatus a scanning  
5 velocity modulation signal with a range of amplitudes representative of a  
6 horizontal scanning frequency of said signal coupled for display;

7 determining said horizontal scanning frequency of said signal coupled for display;

8 generating a control signal in accordance with said determined scanning  
9 frequency to maintain said scanning velocity modulation signal within said range  
10 of amplitudes substantially independent of said horizontal scanning frequency of  
11 said signal coupled for display.

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1 5. The method according to claim 5, wherein said control signal generating  
2 step comprises the step of;

3 representing said determined horizontal scanning frequency with a DC  
4 voltage that varies proportionally as a function of said determined horizontal  
5 scanning frequency.

1 6. The method according to claim 8, comprising the step of;  
2 controlling said amplitude of said scanning velocity modulation  
3 signal responsive to said DC voltage.

1 7. The method according to claim 5, wherein said control signal generating  
2 step comprises the step of;  
3 representing said determined horizontal scanning frequency with a digital  
4 signal generated by a microprocessor.

1 8. The method according to claim 10 comprises the step of;  
2 controlling said amplitude of said scanning velocity modulation  
3 signal responsive to said digital signal.

1 9. A video display apparatus with scan velocity modulation and operable at a  
2 plurality of scanning frequencies comprising:  
3 means for generating a scan velocity modulation signal from a display  
4 signal coupled to said apparatus, said scanning velocity modulation signal having  
5 an amplitude range;  
6 means for determining said horizontal scanning frequency of said display  
7 signal;  
8 means for generating a control signal responsive to said determined  
9 horizontal scanning frequency; and,  
10 a differential amplifier responsive to said control signal for selectively  
11 controlling said scanning velocity modulation signal to maintain said scan  
12 velocity modulation signal within said amplitude range substantially independent  
13 of said determined horizontal scanning frequency.

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1 10. The video display apparatus according to claim 12, wherein said means for  
2 selectively controlling reduces said amplitude of said scanning velocity  
3 modulation signal in accordance a frequency increase of said determined  
4 horizontal scanning frequency.

1 11. The video display apparatus according to claim 12, wherein said means  
2 for selectively controlling halves said amplitude of said scanning velocity  
3 modulation signal for each octave increase in said determined horizontal  
4 scanning frequency.

1 12. The video display apparatus according to claim 12, wherein said control  
2 signal representing said determined horizontal scanning frequency is a DC  
3 voltage that varies proportionally as a function of said determined horizontal  
4 scanning frequency.

1 13. The video display apparatus according to claim 12, wherein said control  
2 signal representing said determined horizontal scanning frequency is a digital  
3 signal generated by a microprocessor.

1 14. The video display apparatus according to claim 16, wherein said digital  
2 signal sets a gain register to control said amplitude of said scanning velocity  
3 modulation signal.